Montville Power LLC
Montville Generating Station
74 Lathrop Road
Uncasville, CT 06382

January 30, 2017

Permit Coordinator
Bureau of Water Protection and Land Reuse, Remediation Division
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127

Subject: TA-326 – Baseline Monitoring Data Transmittal
Groundwater Injection Pilot Test
Montville Generating Station, Montville Power LLC, Montville, CT

To Permit Coordinator:

In accordance with Section VI.B.3.d of Temporary Authorization No. TA-326 issued on November 9, 2016, Montville Power LLC is submitting this data summary review to the Connecticut Department of Energy and Environmental Protection (CTDEEP) for the subject site. The results are for the baseline groundwater monitoring conducted prior to the groundwater injection Pilot Test.

"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

Should you have any questions or require further information, please call Mr. Ian Cambridge at (860) 848-6017.

Thank you,

Nick Volturno
Plant Manager
Montville Power LLC

cc: Jessica Stefanowicz, CTDEEP (e-copy only)
Juan Perez, USEPA (e-copy only)
Robert Spooner, NRG (e-copy only)
Ian Cambridge, NRG Montville (hard copy and e-copy)
Andrew D. Walker, LEP, CB&I (e-copy only)

CB&I Environmental and Infrastructure, Inc.
150 Royall Street
Canton, MA 02021
Tel: +1 617 589 5111
Fax: +1 617 589 5495
www.CBI.com

January 23, 2017

Project #: 631207126.11021320

Permit Coordinator
Bureau of Water Protection and Land Reuse, Remediation Division
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5027

Subject: TA-326 – Baseline Monitoring Data Transmittal
Groundwater Injection Pilot Test
Montville Generating Station, Montville, Connecticut

Dear Permit Coordinator:

On behalf of Montville Power LLC (Montville Power) and its parent company, NRG Energy, Inc. (NRG), CB&I Environmental and Infrastructure, Inc. (CB&I) has prepared this data transmittal as required by Section VI.B.3.d of Temporary Authorization (TA)-326 issued by the Connecticut Department of Energy & Environmental Protection (CTDEEP) on November 9, 2016 (CTDEEP, 2016b). This transmittal summarizes the baseline groundwater monitoring conducted prior to initiation of the groundwater injection Pilot Test conducted in accordance with the Groundwater Remedial Action Plan (Groundwater RAP; CB&I, 2016a) and the permit application submitted for TA-326.

Groundwater Sampling

Groundwater monitoring was conducted on December 2, 2016. Groundwater samples were collected from new pilot test area monitoring wells AOC12-MW401, located in the EnviroBlend (EB) injection area, and AOC12-MW402, located in the TerraBond (TB) injection area. The wells were installed more than 48 hours prior to sampling. Approximate well locations are provided in **Figure 1**.

Depth to groundwater was measured at each of the monitoring wells using an electronic interface probe (IP). The IP used detects water and light non-aqueous phase liquid (LNAPL), if present, to within accuracy of 0.01 foot. LNAPL was not detected in monitoring wells gauged during this event. Depth to water was measured at 11.50 feet from top of PVC for AOC12-MW401 (approximately 8.70 feet below ground surface [bgs]) and 6.60 feet for AOC12-MW402 (approximately 3.85 feet bgs). The water level data will be tabulated and converted to elevation after the wells have been surveyed.

CB&I collected groundwater samples from the monitoring wells using a modified low flow sampling technique. Each well was pumped at a rate that produced little or no draw down while parameters including temperature, pH, oxidation reduction potential (ORP), dissolved oxygen (DO), conductivity, and turbidity were monitored. Logs of field water quality parameters at these wells are provided in **Attachment 1** and final readings are summarized in **Table 1**. Groundwater samples were then collected after the parameters stabilized to ensure that each sample was representative of local aquifer conditions. Based upon the Groundwater RAP and the permit application submitted for TA-326, groundwater samples were submitted to Accutest Laboratories of Marlborough, Massachusetts for analysis of total and dissolved metals (arsenic, iron, magnesium, and vanadium; Method EPA

200.7); sulfate (Method ASTM516-90,02); nitrogen, nitrate, and nitrite (Method EPA 353.2); orthophosphate (Method EPA 365.3); nitrogen nitrite (Method SM 21 4500 NO2 B); total organic carbon (Method SM21 5310 B); and sulfide (Method SM4500S2-F-11). The complete laboratory analytical report for the Pilot Test baseline groundwater sampling event is included in **Attachment 2**.

Groundwater Results

Groundwater analytical results from the baseline sampling event are summarized in **Tables 1 and 2**. As appropriate, **Table 1** compares groundwater analytical results to the Surface Water Protection Criteria (SWPC), Additional SWPC (vanadium), and Alternative SWPC (arsenic). CTDEEP approved the Additional and Alternative SWPC for the subject site in their March 13, 2013 letter (CTDEEP, 2013). **Table 2** compares groundwater analytical results to CTDEEP Water Quality Criteria (WQC) for aquatic life per Section VI.B.1.l of TA-326.

The data presented in **Table 1** indicates:

- Concentrations of total arsenic detected were 24.3 micrograms per liter (ug/L) at AOC12-MW402 and 98.2 ug/L at AOC12-MW401. The concentrations of arsenic detected are greater than the Alternative SWPC (10 ug/L) at both wells (plus one field duplicate). These detections are generally consistent with previous sampling in the Pilot Test area (i.e., AOC12-MW305 and AOC12-MW306).
- Concentrations of total and dissolved vanadium at both wells (and the field duplicate) were non-detect or detected at low concentrations and significantly less than the ASWPC of 4,400 ug/L. These low detections are generally consistent with previous sampling in the Pilot Test area (i.e., AOC12-MW305 and AOC12-MW306).
- Iron and magnesium do not have historic data sets or ASWPC for comparison of results. These metals and geochemistry parameters were analyzed to evaluate reagent activity and not for compliance monitoring.

The groundwater data from several previous rounds of sampling have indicated that there is little difference between dissolved and total metals concentrations in groundwater at the Montville site (Shaw, 2010). The Pilot Test baseline groundwater monitoring results presented in **Tables 1 and 2** are generally consistent with that finding. The data presented in **Table 2** indicates that the concentration of dissolved arsenic at AOC12-MW401 of 97.0 ug/L is greater than the acute Water Quality Criteria (WQC) for saltwater of 69 ug/L. As such, the concentration of dissolved arsenic at AOC12-MW401, which is within 100 feet of the river, is consistent with previous groundwater monitoring results in the Pilot Test area and not newly elevated as a result of the Pilot Test activities.

Laboratory Analytical - QA/QC Evaluation

Laboratory analysis completed as part of this assessment was conducted in accordance with CTDEEP's Reasonable Confidence Protocol and the site specific Quality Assurance Project Plan (QAPP). The site specific QAPP was developed for the subject site in accordance with U.S. Environmental Protection Agency (USEPA) guidance (Shaw, 2011). The QAPP presents the requirements and procedures for conducting field sampling activities and investigations at the site so that (1) the data quality objectives specified for this project are met, (2) the field sampling protocols are documented and reviewed in a consistent manner, and (3) scientifically valid and defensible data are collected. Field sampling activities discussed above were completed in general compliance with the QAPP that has been generated for the site.

CB&I requested that laboratory analysis be conducted in accordance with the QAPP and CTDEEP's Reasonable Confidence Protocol (CTDEP, 2007). CB&I performed a data validation review for the laboratory report and documented the results in a data validation worksheet. The data validation worksheet is included with the laboratory report in **Attachment 2**. This worksheet is consistent with the data quality assessment and data usability evaluations detailed in CTDEEP guidance (CTDEP, 2009)

In general, laboratory analyses were completed in accordance with the site QAPP and CTDEEP's Reasonable Confidence Protocol. However, a few minor quality assurance/quality control (QA/QC) issues, which are summarized in the validation worksheet and laboratory report narrative, were identified. These identified QA/QC issues resulted in some detection limits and reported results being qualified. QA/QC issues noted included:

- The RPD for duplicate sample for orthophosphate were outside control limits. However, the percent difference is considered acceptable due to low duplicate and sample concentrations and no qualification is necessary.
- The orthophosphate samples were filtered at the laboratory prior to analysis though the method requires field filtration within 15 minutes of sampling. No qualification is necessary and field filtering will be implemented for future sample collection.
- The relative percent difference (RPD) of a serial dilution sample indicated arsenic was outside control limits. However, the percent difference is considered acceptable due to low initial sample concentration (<50 times instrument detection limit) and no qualification is necessary.

A number of sample results were reported at concentrations less than the reporting limit but greater than the method detection limit. Although this is not specifically a QA/QC issue, the results should be considered estimated and are flagged with a "J". In summary, each of the identified issues had no overall effect on the conclusions drawn from the data, and the data is acceptable for the purposes of this submittal.

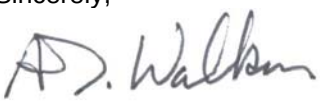
Summary Review

Total arsenic concentrations in groundwater during the baseline monitoring event are generally consistent with previous monitoring at other wells in the area of interest for the Groundwater RAP. Baseline groundwater results will be compared to post-injection sampling results in future data summary transmittals prepared per TA-326.

If you have any questions regarding this letter or any other site matter, please do not hesitate to call me at 617-589-6143.

"I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

Sincerely,



Andrew D. Walker, LEP, LSP
Project Manager
CB&I Environmental and Infrastructure, Inc.

Phone: 617-589-6143
E-mail Address: Andrew.Walker@CBI.com

Enclosures:

Tables

Table 1 - Groundwater Analytical Results Compared to ASWPC
Table 2 - Groundwater Analytical Results Compared to Acute WQC

Figure

Figure 1 - Site Plan

Attachments

Attachment 1 – Field Sampling Data Sheets
Attachment 2 - Laboratory Analytical Reports for Groundwater with Data Validation Worksheet

cc: Ms. Jessica Stefanowicz, CTDEEP (electronic only)
Mr. Ian Cambridge, Montville Power LLC (hard copy and electronic)
Mr. Robert Spooner, NRG (electronic only)
Mr. Juan Perez, USEPA (electronic only)

REFERENCES

CB&I, 2016a. Remedial Action Plan for Groundwater, Montville Electric Generating Station, Montville, Connecticut. CB&I Environmental and Infrastructure, Inc. February 25, 2016 (revisions dated June 16, 2016).

CB&I, 2016b. Site Wide Remedial Action Plan, Montville Generating Station, Montville, Connecticut. CB&I Environmental and Infrastructure, Inc. July 19, 2016.

CTDEP, 2007. Laboratory Quality Assurance and Quality Control Guidance, Reasonable Confidence Protocols Guidance Document. Connecticut Department of Environmental Protection. November 2007.

CTDEP, 2009. Laboratory Quality Assurance and Quality Control, Data Quality Assessment and Data Usability Evaluation. Connecticut Department of Environmental Protection. May 2009.

CTDEEP, 2013. Request for Criteria for Additional Polluting Substances and Alternative Criteria, Montville Station, 74 Lathrop Road, Montville. Connecticut Department of Energy & Environmental Protection. March 13, 2013.

CTDEEP, 2016a. Groundwater Remedial Action Plan, Montville Station, 74 Lathrop Road, Montville, REM ID 4204. June 30, 2016

CTDEEP, 2016b. Temporary Authorization TA-326, Montville Power LLC, Montville Station, 74 Lathrop Road, Montville. November 9, 2016

Shaw, 2011. Quality Assurance Project Plan, NRG Montville Generating Station. Shaw Environmental, Inc. March 2008, Revised August 2011.

TABLES

Table 1
Groundwater Analytical Results Compared to ASWPC
Pilot Test Baseline December 2016
Montville Power LLC, Montville, CT

CONSTITUENT (ug/l)	UNITS	SWPC or Alt/Add SWPC (1)	AOC12-MW-401 12/2/2016 Primary	AOC12-MW-402 12/2/2016 Primary	AOC12-MW-402 12/2/2016 Duplicate 1
Metals (total)					
Arsenic	ug/l	10	{98.2}	{24.3}	{25.2}
Iron	ug/l	NE	32100	1680	1650
Magnesium	ug/l	NE	5700	1360BJ	1340BJ
Vanadium	ug/l	4400	25.3BJ	0.80BJ	<0.72
Metals (dissolved)					
Arsenic	ug/l	10	{97.0}	{24.1}	{24.3}
Iron	ug/l	NE	33000	1670	1700
Magnesium	ug/l	NE	5870	1370BJ	1370BJ
Vanadium	ug/l	4400	16.0BJ	<0.72	0.80BJ
Miscellaneous					
Nitrate/Nitrogen	ug/l	NE	<110	150	---
Nitrite/Nitrogen	ug/l	NE	<10	<10	---
Nitrogen, Nitrate and Nitrite	ug/l	NE	<100	150	---
Orthophosphate	ug/l	NE	140	<100	---
Sulfate	ug/l	NE	146000	13800	---
Sulfide	ug/l	NE	280BJ	280BJ	---
TOC	ug/l	NE	<1000	<1000	---
Field Parameters					
pH		NE	6.36	6.47	---
ORP	mV	NE	-23.5	-4.2	---
Dissolved Oxygen	mg/l	NE	0.8	1.23	---
Specific Conductance	mS/cm	NE	0.386	0.073	---
Temperature	deg. C	NE	15.3	14.3	---
Turbidity	NTU	NE	0	0	---

Notes:

SWPC = Surface Water Protection Criteria
--- = Constituent not analyzed for.
NE = None Established.
(1)= Approved Alternative and Additional SWPC in March 13, 2013 CTDEEP letter
{Red Highlight} = Result is above appropriate SWPC
ug/l = micrograms per liter
B = Less than detection limit, lab qualifier
J = Less than detection limit, validation qualifier
mg/l = milligrams per liter
mS/cm = milliseimens per centimeter
deg. C = degrees celcius
NTU = nephelometric turbidity unit
Lab results have been validated.

Table 2
Groundwater Analytical Results Compared to WQC Acute Fresh and Salt
Pilot Test Baseline December 2016
Montville Power LLC, Montville, CT

CONSTITUENT	UNITS	Acute WQC Freshwater	Acute WQC Saltwater	AOC12-MW-401 12/2/2016 Primary	AOC12-MW-402 12/2/2016 Primary	AOC12-MW-402 12/2/2016 Duplicate 1
Metals (total)						
Arsenic	ug/l	340	69	{98.2}	24.3	25.2
Iron	ug/l	NE	NE	32100	1680	1650
Magnesium	ug/l	NE	NE	5700	1360BJ	1340BJ
Vanadium	ug/l	NE	NE	25.3BJ	0.80BJ	<0.72
Metals (dissolved)						
Arsenic	ug/l	340	69	{97.0}	24.1	24.3
Iron	ug/l	NE	NE	33000	1670	1700
Magnesium	ug/l	NE	NE	5870	1370BJ	1370BJ
Vanadium	ug/l	NE	NE	16.0BJ	<0.72	0.80BJ
Miscellaneous						
Nitrate/Nitrogen	ug/l	NE	NE	<110	150	---
Nitrite/Nitrogen	ug/l	NE	NE	<10	<10	---
Nitrogen, Nitrate and Nitrite	ug/l	NE	NE	<100	150	---
Orthophosphate	ug/l	NE	NE	140	<100	---
Sulfate	ug/l	NE	NE	146000	13800	---
Sulfide	ug/l	NE	NE	280BJ	280BJ	---
TOC	ug/l	NE	NE	<1000	<1000	---

Notes:

WQC = Numerical Water Quality Criteria for chemical constituents.

ug/l = micrograms per liter.

B = Less than detection limit, lab qualifier

J = Less than detection limit, validation qualifier

--- = Constituent not analyzed for.

NE = None Established.

{Red Highlight} = Result is above WQC

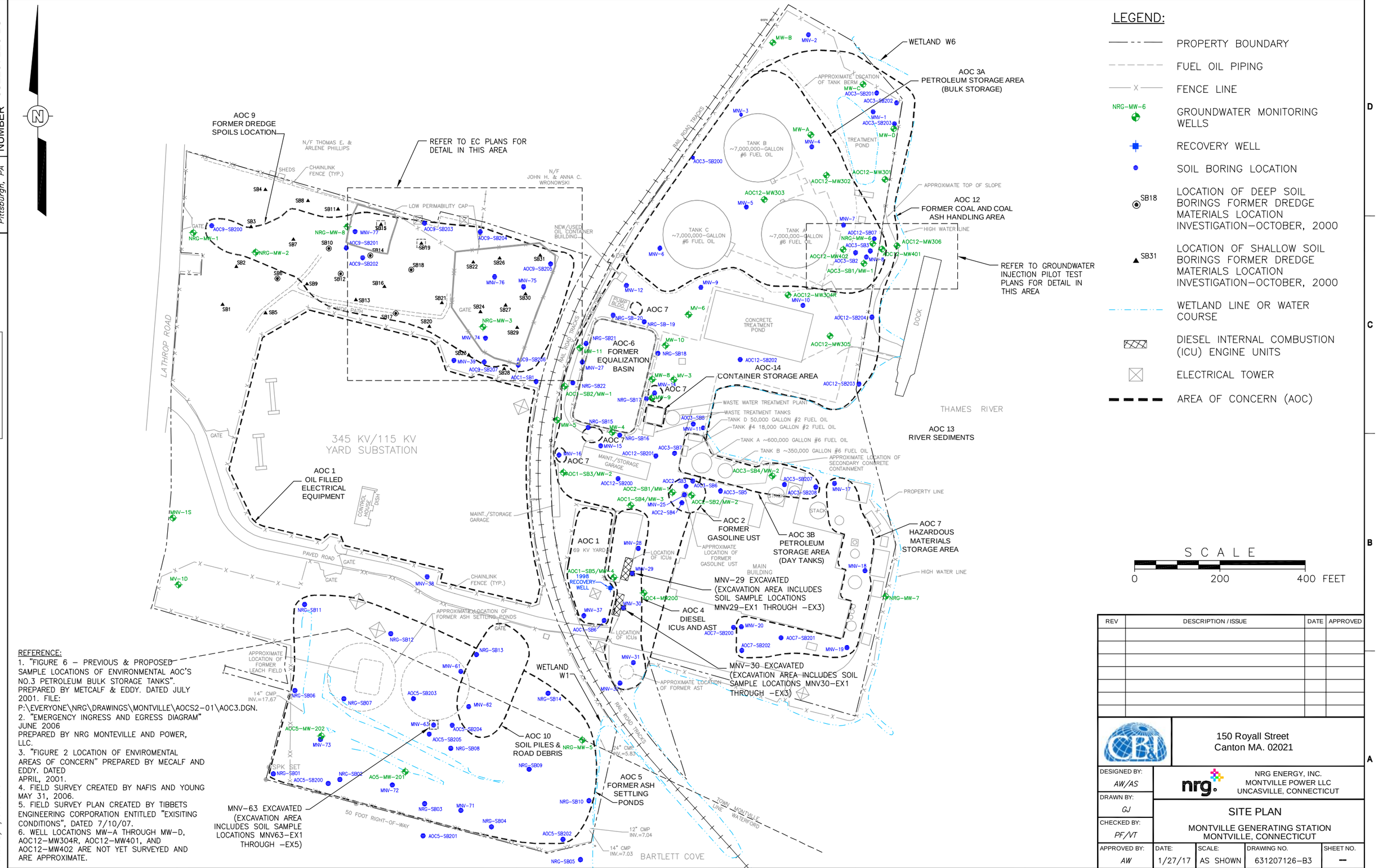
Lab results have been validated.

FIGURE

OFFICE Pittsburgh, PA

DRAWING NUMBER 631207126-B3

VERIFY SCALE 0 1"



REFERENCE:

1. "FIGURE 6 – PREVIOUS & PROPOSED SAMPLE LOCATIONS OF ENVIRONMENTAL AOC'S NO.3 PETROLEUM BULK STORAGE TANKS". PREPARED BY METCALF & EDDY. DATED JULY 2001. FILE: P:\EVERYONE\NRG\DRAWINGS\MONTVILLE\AOCS2-01\AOC3.DGN.
2. "EMERGENCY INGRESS AND EGRESS DIAGRAM" JUNE 2006 PREPARED BY NRG MONTEVILLE AND POWER, LLC.
3. "FIGURE 2 LOCATION OF ENVIROMENTAL AREAS OF CONCERN" PREPARED BY MECALF AND EDDY. DATED APRIL, 2001.
4. FIELD SURVEY CREATED BY NAFIS AND YOUNG MAY 31, 2006.
5. FIELD SURVEY PLAN CREATED BY TIBBETS ENGINEERING CORPORATION ENTITLED "EXISITING CONDITIONS", DATED 7/10/07.
6. WELL LOCATIONS MW-A THROUGH MW-D, AOC12-MW304R, AOC12-MW401, AND AOC12-MW402 ARE NOT YET SURVEYED AND ARE APPROXIMATE.

LEGEND:

- PROPERTY BOUNDARY
- FUEL OIL PIPING
- FENCE LINE
- NRG-MW-6 — GROUNDWATER MONITORING WELLS
- RECOVERY WELL
- SOIL BORING LOCATION
- SB18 — LOCATION OF DEEP SOIL BORINGS FORMER DREDGE MATERIALS LOCATION INVESTIGATION–OCTOBER, 2000
- SB31 — LOCATION OF SHALLOW SOIL BORINGS FORMER DREDGE MATERIALS LOCATION INVESTIGATION–OCTOBER, 2000
- WETLAND LINE OR WATER COURSE
- DIESEL INTERNAL COMBUSTION (ICU) ENGINE UNITS
- ELECTRICAL TOWER
- AREA OF CONCERN (AOC)

SCALE
0 200 400 FEET

REV	DESCRIPTION / ISSUE	DATE	APPROVED

150 Royall Street
Canton MA. 02021

DESIGNED BY: AW/AS	NRG ENERGY, INC. MONTVILLE POWER LLC UNCASVILLE, CONNECTICUT			
DRAWN BY: GJ	SITE PLAN MONTVILLE GENERATING STATION MONTVILLE, CONNECTICUT			
CHECKED BY: PF/VT				
APPROVED BY: AW	DATE: 1/27/17	SCALE: AS SHOWN	DRAWING NO. 631207126-B3	SHEET NO. –

File: O:\Shaw Offices - CAD Files\Stoughton, MA\NRG\Montville\631207126\631207126-B3.dwg
Plot Date/Time: Jan 27, 2017 - 2:26pm
Plotted By: joshua.euler

ATTACHMENT 1

FIELD SAMPLING DATA SHEETS

Job Name: NRG Montville
Job Number: 631207126-11021320

Measured to Top of PVC: (Yes) No (Circle One)

Well ID: MW-402	**Date:** 12-07-16	**Depth To Water:** 6.60'	**Depth To LNAPL:** —	**Depth To Bottom:** 19.75'
Screen Interval: 2'-17' (BGS)	**Target Pump Intake Depth:** 10' (BGS)			**Well Depth:** 17' (BGS)
Pump Type: Peristaltic	**Actual Pump Intake Depth:** 10' (BGS)		**Total Volume Purged:** 4.5L	

Time	Depth to Water from (ft.) Top of riser	Pump Dial Setting[1]	Purge Rate (ml./min.)	Cum. Volume Purged (Liters)	Temperature (°C)	pH (SU)	Specific Conductance (ms/cm)[2]	Dissolved Oxygen (mg/L)	ORP[3] (mV)	Turbidity (NTU)	Comments
Stabilization Criteria			3%		3%	0.1	3%	10% or <2	10	10% or <1	for three consecutive readings
0720					12.8	8.90	0.085	3.76	-25.5	38.4	
0725	6.6'				13.6	8.10	0.072	2.27	-16.9	35.4	
0730				1L	13.5	7.58	0.071	1.82	-14.4	33.7	
0735					13.3	7.11	0.069	1.72	-14.1	27.6	
0740				2L	14.0	6.81	0.069	1.60	-13.8	20.2	
0745	6.6'				14.3	6.64	0.071	1.47	-13.7	15.2	
0750					13.9	6.60	0.071	1.45	-12.9	11.6	
0755				3L	14.3	6.55	0.071	1.41	-11.7	6.5	
0800	6.6'				14.0	6.53	0.070	1.38	-10.9	5.0	
0805				~3.5L	14.2	6.51	0.071	1.32	-10.6	2.3	
0810				4L	14.4	6.49	0.072	1.29	-8.5	-0.3	
0815					14.1	6.48	0.073	1.25	-6.7	-0.5	
0820				4.5L	14.3	6.47	0.073	1.23	-4.2	-1.1	

1. Pump dial setting (example: Hertz, cycles/min, etc.)
2. µSiemens per cm (same as µmhos/cm) at 25°C.
3. Oxidation reduction potential (ORP)
4. Target Drawdown not to exceed is 0.3 ft (about 4 inches)

Field Personnel: A. Maynard

BGS = Below Ground surface, not measured from top of riser like DTW + DTB were

Job Name: NRG Montville
Job Number: 631207126-11021320

Measured to Top of PVC: (Yes) No (Circle One)

Well ID: AOC12-MW-401	**Date:** 12-02-16	**Depth To Water:** 11.50'	**Depth To LNAPL:** —	**Depth To Bottom:** 22.8'
Screen Interval: 5'-20' BGS	**Target Pump Intake Depth:** 17'			**Well Depth:** 20' (BGS)
Pump Type: Peristaltic	**Actual Pump Intake Depth:** ~14'		**Total Volume Purged:** 2.5L	

Time	Depth to Water (ft.)	Pump Dial Setting[1]	Purge Rate (ml./min.)	Cum. Volume Purged (Liters)	Temperature (°C)	pH (SU)	Specific Conductance (ms/cm)[2]	Dissolved Oxygen (mg/L)	ORP[3] (mV)	Turbidity (NTU)	Comments
Stabilization Criteria			3%		3%	0.1	3%	10% or <2	10	10% or <1	for three consecutive readings
0930					15.5	6.58	0.378	2.66	7.1	3.4	
0935					15.0	6.44	0.378	1.52	-5.3	1.8	
0940					15.2	6.39	0.380	1.10	-13.2	2.4	
0945				1L	15.3	6.39	0.381	0.96	-17.8	2.0	
0950					15.5	6.38	0.386	0.88	-20.6	1.4	
0955					15.0	6.37	0.383	0.85	-22.0	0.9	
1000				2L	15.2	6.36	0.387	0.84	-22.4	0.5	
1005					15.2	6.36	0.383	0.81	-22.9	-1.0	
1010				~2.5L	15.3	6.36	0.386	0.80	-23.5	-1.4	sampled @ 1010

1. Pump dial setting (example: Hertz, cycles/min, etc.)
2. µSiemens per cm (same as µmhos/cm) at 25°C.
3. Oxidation reduction potential (ORP)
4. Target Drawdown not to exceed is 0.3 ft (about 4 inches)

Field Personnel: A Maynard

ATTACHMENT 2

LABORATORY ANALYTICAL REPORT FOR GROUNDWATER WITH DATA VALIDATION WORKSHEET

Data Usability Worksheet

Project Name :	NRG Montville	**Job Number :**	631207126
Prepared By:	Cathy Joe Mainville	**Date :**	12/19/2016
Validated By:	Kim Napier	**Date :**	1/3/2017
Matrix:	Groundwater		
Analyte Group :	Select Metals	**Analytical Method :**	EPA 200.7
	Sulfate		ASTM516-90,02
	Nitrogen, Nitrate + Nitrite		EPA 353.2
	Orthophosphate		EPA 365.3
	Nitrogen Nitrite		SM 21 4500 NO2 B
	Total Organic Carbon		SM21 5310 B
	Sulfide		SM4500S2-F-11

Completed RCP Certification Form included: Yes **Laboratory ID No. :** MC48956

Chain of Custody included in Data Package ? Yes **Is it Complete ?** Yes

Sample Collection Date	Analysis	Allowable Holding Time for	Allowable Holding Time	Analysis Date
12/2/2016	EPA 200.7 - Metals		180 Days (Mercury 28 Days)	12/14/2016
12/2/2016	ASTM516-90,02 - Sulfate		28 Days	12/2/2016
12/2/2016	EPA 353.2 - Nitrogen, Nitrate + Nitrite		28 Days	12/8/2016
12/2/2016	EPA 365.3 - Orthophosphate		48 Hours/ Client to filter sample at collection	12/2/2016
12/2/2016	SM 21 4500 NO2 B - Nitrogen Nitrite		48 hours	12/2/2016
12/2/2016	SM21 5310 B - Total Organic Carbon		28 Days	12/5/2016
12/2/2016	SM4500S2-F-11 - Sulfide		7 Days	12/5/2016

Sample temperature within QC limits: Yes, 1.8 °C

Surrogate Recovery
Are all % recoveries within the allowable range ? NA

If No, List sample ID where range was exceeded: N/A

MS/MSD
Are all MS/MSD sample recoveries within the QC limits ? Yes

If No, list sample ID, date and compound where limit was exceeded: N/A

Laboratory Control Samples
Are all laboratory control sample recoveries within the QC limits ? Yes

If no, list sample ID where range was exceeded:

Equipment Field Blank ID : EQUIPMENT BLANK 12/2/2016
Trip Blank ID : N/A
Method Blank: 12/14/2016

Were any compounds identified in the method blank, field blank or trip blank above detection limits ? No

If so, list Sample ID/Compound/Concentration/Units:

Notes:

Batch GN55475

RPD(s) for Duplicate for Phosphate, Ortho are outside control limits for sample GN55475-D1. RPD acceptable due to low duplicate and sample concentrations.
No qualification necessary

MC48956-4 for Phosphate, Ortho: Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
No qualifiers applied
MC48956-1 for Phosphate, Ortho: Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
No qualifiers applied
Batch MP97542

RPD(s) for Serial Dilution for Arsenic are outside control limits for sample MP97542-SD1. Percent difference acceptable due to low initial sample concentration (<50 times IDL).
No qualification necessary

Results reported > MDL and < RL ("B"-flagged by the lab) should be considered as estimated and qualified "J"

Reviewed By: Kim Napier

Report of Analysis

Client Sample ID:	AOC12-MW-402		
Lab Sample ID:	MC48956-1	Date Sampled:	12/02/16
Matrix:	AQ - Ground Water	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.3	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1680	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1360 B J	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.80 B J	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-402		
Lab Sample ID:	MC48956-1	Date Sampled:	12/02/16
Matrix:	AQ - Ground Water	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	0.15	0.11	0.019	mg/l	1	12/08/16 16:46	VY	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.15	0.10	0.018	mg/l	1	12/08/16 16:46	VY	EPA 353.2
Nitrogen, Nitrite	<0.010	0.010	0.0010	mg/l	1	12/02/16 14:10	MC	SM 21 4500 NO2 B
Phosphate, Ortho [b]	<0.10	0.10	0.015	mg/l	1	12/02/16 15:44	VY	EPA 365.3
Sulfate	13.8	5.0	1.1	mg/l	1	12/02/16	EAL	ASTM516-90,02
Sulfide [c]	0.28 B J	2.0	0.26	mg/l	1	12/05/16 16:25	ANJ	SM4500S2- F-11
Total Organic Carbon	<1.0	1.0	0.16	mg/l	1	12/05/16 16:40	VY	SM21 5310 B

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
(c) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-402		
Lab Sample ID:	MC48956-1F	Date Sampled:	12/02/16
Matrix:	AQ - Groundwater Filtered	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.1	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1670	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1370 B J	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.72 U	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-402-DUP		
Lab Sample ID:	MC48956-2	Date Sampled:	12/02/16
Matrix:	AQ - Ground Water	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	25.2	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1650	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1340 B J	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.72 U	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-402-DUP		
Lab Sample ID:	MC48956-2F	Date Sampled:	12/02/16
Matrix:	AQ - Groundwater Filtered	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.3	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1700	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1370 B J	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.80 B J	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

SGS Accutest

Report of Analysis

Client Sample ID:	AOC12-MW-401		
Lab Sample ID:	MC48956-4	Date Sampled:	12/02/16
Matrix:	AQ - Ground Water	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	98.2	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	32100	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	5700	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	25.3 B J	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-401		
Lab Sample ID:	MC48956-4	Date Sampled:	12/02/16
Matrix:	AQ - Ground Water	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	<0.11	0.11	0.019	mg/l	1	12/08/16 16:47	VY	EPA 353.2
Nitrogen, Nitrate + Nitrite	<0.10	0.10	0.018	mg/l	1	12/08/16 16:47	VY	EPA 353.2
Nitrogen, Nitrite	<0.010	0.010	0.0010	mg/l	1	12/02/16 14:10	MC	SM 21 4500 NO2 B
Phosphate, Ortho [b]	0.14	0.10	0.015	mg/l	1	12/02/16 15:44	VY	EPA 365.3
Sulfate	146	50	11	mg/l	10	12/02/16	EAL	ASTM516-90,02
Sulfide [c]	0.28 B J	2.0	0.26	mg/l	1	12/05/16 16:25	ANJ	SM4500S2- F-11
Total Organic Carbon	<1.0	1.0	0.16	mg/l	1	12/05/16 16:53	VY	SM21 5310 B

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
(c) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result >= MDL but < RL

Report of Analysis

Client Sample ID:	AOC12-MW-401		
Lab Sample ID:	MC48956-4F	Date Sampled:	12/02/16
Matrix:	AQ - Groundwater Filtered	Date Received:	12/02/16
		Percent Solids:	n/a
Project:	NRG Montville Lathrop Road, Montville, CT		

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	97.0	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	33000	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	5870	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	16.0 B J	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

e-Hardcopy 2.0
Automated Report

Technical Report for

CB&I

NRG Montville Lathrop Road, Montville, CT

631207126

SGS Accutest Job Number: MC48956

Sampling Date: 12/02/16

Report to:

CB&I
150 Royall Street
Canton, MA 02021
andrea.steele@cbi.com

ATTN: Andrea Steele

Total number of pages in report: **46**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

H. (Brad) Madadian
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO (MA00136) MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Sections: 1 2 3 4 5 6 7 8 9

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Sample Summary

CB&I

Job No: MC48956

NRG Montville Lathrop Road, Montville, CT
Project No: 631207126

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC48956-1	12/02/16	08:20 AM		12/02/16	AQ	Ground Water	AOC12-MW-402
MC48956-1F	12/02/16	08:20 AM		12/02/16	AQ	Groundwater Filtered	AOC12-MW-402
MC48956-2	12/02/16	08:20 AM		12/02/16	AQ	Ground Water	AOC12-MW-402-DUP
MC48956-2F	12/02/16	08:20 AM		12/02/16	AQ	Groundwater Filtered	AOC12-MW-402-DUP
MC48956-3	12/02/16	09:00 AM		12/02/16	AQ	Equipment Blank	EQUIPMENT BLANK
MC48956-4	12/02/16	10:10 AM		12/02/16	AQ	Ground Water	AOC12-MW-401
MC48956-4F	12/02/16	10:10 AM		12/02/16	AQ	Groundwater Filtered	AOC12-MW-401

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: CB&I **Job No** MC48956

Site: NRG Montville Lathrop Road, Montville, CT **Report Date** 12/15/2016 6:30:39 P

4 Sample(s) were collected on 12/02/2016 and were received at SGS Accutest New England on 12/02/2016 properly preserved, at 1.8 Deg. C and intact. These Samples received a job number of MC48956. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** N:MP97542

- MC48956-1: Analysis performed at SGS Accutest, Dayton, NJ.
- MC48956-2,3,4: Analysis performed at SGS Accutest, Dayton, NJ.

Wet Chemistry By Method ASTM516-90,02

Matrix: AQ **Batch ID:** GN55468

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method EPA 353.2

Matrix: AQ **Batch ID:** GP21174

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** R39334

- MC48956-1 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Matrix: AQ **Batch ID:** R39335

- MC48956-4 for Nitrogen, Nitrate: Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Wet Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GN55475

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC48956-1MS, MC48956-1DUP were used as the QC samples for Phosphate, Ortho.
- RPD(s) for Duplicate for Phosphate, Ortho are outside control limits for sample GN55475-D1. RPD acceptable due to low duplicate and sample concentrations.
- MC48956-4 for Phosphate, Ortho: Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
- MC48956-1 for Phosphate, Ortho: Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.

Wet Chemistry By Method SM 21 4500 NO2 B

Matrix: AQ **Batch ID:** GP21167

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM21 5310 B

Matrix: AQ **Batch ID:** GP21171

- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC48956-1DUP, MC48956-1MS were used as the QC samples for Total Organic Carbon.

Wet Chemistry By Method SM4500S2- F-11

Matrix: AQ **Batch ID:** N:GN56002

- MC48956-1 for Sulfide: Analysis performed at SGS Accutest, Dayton, NJ.
- MC48956-4 for Sulfide: Analysis performed at SGS Accutest, Dayton, NJ.

SGS Accutest New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Laboratory Director for SGS Accutest New England or assignee as verified by the signature on the cover page has authorized the release of this report(MC48956).

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	SGS Accutest New England	**Job No**	MC48956
Site:	FDG: NRG Montville Lathrop Road, Montville, CT	**Report Date**	12/15/2016 11:55:06 A

On 12/03/2016, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of MC48956 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method EPA 200.7

Matrix: AQ **Batch ID:** MP97542

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC33051-1FSDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic are outside control limits for sample MP97542-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry By Method SM4500S2- F-11

Matrix: AQ **Batch ID:** GN56002

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: MC48956
Account: CB&I
Project: NRG Montville Lathrop Road, Montville, CT
Collected: 12/02/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC48956-1	**AOC12-MW-402**					
Arsenic [a]		24.3	3.0	2.8	ug/l	EPA 200.7
Iron [a]		1680	100	18	ug/l	EPA 200.7
Magnesium [a]		1360 B	5000	90	ug/l	EPA 200.7
Vanadium [a]		0.80 B	50	0.72	ug/l	EPA 200.7
Nitrogen, Nitrate [b]		0.15	0.11		mg/l	EPA 353.2
Nitrogen, Nitrate + Nitrite		0.15	0.10		mg/l	EPA 353.2
Sulfate		13.8	5.0		mg/l	ASTM516-90,02
Sulfide [a]		0.28 B	2.0	0.26	mg/l	SM4500S2- F-11
MC48956-1F	**AOC12-MW-402**					
Arsenic [a]		24.1	3.0	2.8	ug/l	EPA 200.7
Iron [a]		1670	100	18	ug/l	EPA 200.7
Magnesium [a]		1370 B	5000	90	ug/l	EPA 200.7
MC48956-2	**AOC12-MW-402-DUP**					
Arsenic [a]		25.2	3.0	2.8	ug/l	EPA 200.7
Iron [a]		1650	100	18	ug/l	EPA 200.7
Magnesium [a]		1340 B	5000	90	ug/l	EPA 200.7
MC48956-2F	**AOC12-MW-402-DUP**					
Arsenic [a]		24.3	3.0	2.8	ug/l	EPA 200.7
Iron [a]		1700	100	18	ug/l	EPA 200.7
Magnesium [a]		1370 B	5000	90	ug/l	EPA 200.7
Vanadium [a]		0.80 B	50	0.72	ug/l	EPA 200.7
MC48956-3	**EQUIPMENT BLANK**					
No hits reported in this sample.						
MC48956-4	**AOC12-MW-401**					
Arsenic [a]		98.2	3.0	2.8	ug/l	EPA 200.7
Iron [a]		32100	100	18	ug/l	EPA 200.7
Magnesium [a]		5700	5000	90	ug/l	EPA 200.7
Vanadium [a]		25.3 B	50	0.72	ug/l	EPA 200.7
Phosphate, Ortho [c]		0.14	0.10		mg/l	EPA 365.3
Sulfate		146	50		mg/l	ASTM516-90,02
Sulfide [a]		0.28 B	2.0	0.26	mg/l	SM4500S2- F-11

Summary of Hits

Job Number: MC48956
Account: CB&I
Project: NRG Montville Lathrop Road, Montville, CT
Collected: 12/02/16

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC48956-4F	**AOC12-MW-401**					
Arsenic [a]		97.0	3.0	2.8	ug/l	EPA 200.7
Iron [a]		33000	100	18	ug/l	EPA 200.7
Magnesium [a]		5870	5000	90	ug/l	EPA 200.7
Vanadium [a]		16.0 B	50	0.72	ug/l	EPA 200.7

(a) Analysis performed at SGS Accutest, Dayton, NJ.
(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(c) Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: AOC12-MW-402
Lab Sample ID: MC48956-1
Matrix: AQ - Ground Water
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.3	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1680	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1360 B	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.80 B	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-402
Lab Sample ID: MC48956-1
Matrix: AQ - Ground Water
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	0.15	0.11	0.019	mg/l	1	12/08/16 16:46	VY	EPA 353.2
Nitrogen, Nitrate + Nitrite	0.15	0.10	0.018	mg/l	1	12/08/16 16:46	VY	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	0.0010	mg/l	1	12/02/16 14:10	MC	SM 21 4500 NO2 B
Phosphate, Ortho [b]	< 0.10	0.10	0.015	mg/l	1	12/02/16 15:44	VY	EPA 365.3
Sulfate	13.8	5.0	1.1	mg/l	1	12/02/16	EAL	ASTM516-90,02
Sulfide [c]	0.28 B	2.0	0.26	mg/l	1	12/05/16 16:25	ANJ	SM4500S2- F-11
Total Organic Carbon	< 1.0	1.0	0.16	mg/l	1	12/05/16 16:40	VY	SM21 5310 B

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
(c) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-402
Lab Sample ID: MC48956-1F
Matrix: AQ - Groundwater Filtered
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.1	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1670	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1370 B	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.72 U	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-402-DUP
Lab Sample ID: MC48956-2
Matrix: AQ - Ground Water
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	25.2	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1650	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1340 B	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.72 U	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-402-DUP
Lab Sample ID: MC48956-2F
Matrix: AQ - Groundwater Filtered
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	24.3	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	1700	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	1370 B	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.80 B	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: EQUIPMENT BLANK
Lab Sample ID: MC48956-3
Matrix: AQ - Equipment Blank
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	2.8 U	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	18 U	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	90 U	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	0.72 U	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-401
Lab Sample ID: MC48956-4
Matrix: AQ - Ground Water
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	98.2	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	32100	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	5700	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	25.3 B	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-401
Lab Sample ID: MC48956-4
Matrix: AQ - Ground Water
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Nitrogen, Nitrate [a]	< 0.11	0.11	0.019	mg/l	1	12/08/16 16:47	VY	EPA 353.2
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	0.018	mg/l	1	12/08/16 16:47	VY	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	0.0010	mg/l	1	12/02/16 14:10	MC	SM 21 4500 NO2 B
Phosphate, Ortho [b]	0.14	0.10	0.015	mg/l	1	12/02/16 15:44	VY	EPA 365.3
Sulfate	146	50	11	mg/l	10	12/02/16	EAL	ASTM516-90,02
Sulfide [c]	0.28 B	2.0	0.26	mg/l	1	12/05/16 16:25	ANJ	SM4500S2- F-11
Total Organic Carbon	< 1.0	1.0	0.16	mg/l	1	12/05/16 16:53	VY	SM21 5310 B

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(b) Filtration performed at the lab prior to analysis. Method requires field filtration within 15 minutes of sampling.
(c) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit
U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: AOC12-MW-401
Lab Sample ID: MC48956-4F
Matrix: AQ - Groundwater Filtered
Project: NRG Montville Lathrop Road, Montville, CT

Date Sampled: 12/02/16
Date Received: 12/02/16
Percent Solids: n/a

Dissolved Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic [a]	97.0	3.0	2.8	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Iron [a]	33000	100	18	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Magnesium [a]	5870	5000	90	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]
Vanadium [a]	16.0 B	50	0.72	ug/l	1	12/14/16	12/14/16	ANJ	EPA 200.7 [1]	EPA 200.7 [2]

(1) Instrument QC Batch: N:MA40958
(2) Prep QC Batch: N:MP97542

(a) Analysis performed at SGS Accutest, Dayton, NJ.

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- RCP Form
- RCP Form (SGS Accutest New Jersey)
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest of New England
50 D'Angelo Drive, Building One Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

FED-EX Tracking # | Bottle Order Control # | SGS Accutest Quote # | SGS Accutest Job # MC48956

Client / Reporting Information
Company Name: CBI
Street Address: 150 Royall St
City: Canton State: MA Zip: 02021
Project Contact: Andrea Steele E-mail: Andrea.Steele@CBI
Phone #: 774-573-9090 Fax #
Sampler(s) Name(s): Austin Magnant Phone #: 774-551-6147

Project Information
Project Name: NRG Montville
Street: 74 Lathrop Rd
City: Uncasville, CT
Project#: 63127126
Client PO#: P-Card
Project Manager

Billing Information (If different from Report to)
Company Name
Street Address
City State Zip
Attention: PO#

Requested Analysis (see TEST CODE sheet): Total As, Fe, Mg, V (Method 200.7); Diss As, Fe, Mg, V (Method 200.7); Sulfate, Ortho-Phosphate, Nitrate/Nitrite; TOC; Sulfide; Nitrate

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Other (Zinc Acetate)	Total As, Fe, Mg, V (Method 200.7)	Diss As, Fe, Mg, V (Method 200.7)	Sulfate, Ortho-Phosphate, Nitrate/Nitrite	TOC	Sulfide	Nitrate	LAB USE ONLY
-1	AU12-MW-402		12-02	0730	AM	GW	9		2	2	1	1				3	1	1	1	3	2	1	
-2	AU-12-MW-402-DUP		12-02	0830	AM	GW	2			2							1	1					
-3	Equipment Blank		12-02	0900	AM	GW	1			1							1						
-4	AU12-MW-401		12-02	1010	AM	GW	9		2	2	1	1				3	1	1	1	3	2	1	

LAB USE ONLY: 9D; SUB

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

INITIAL ASSESSMENT ____
LABEL VERIFICATION ____

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [x] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format ____
- [ ] Other ____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions
Complete analysis where given (Eg. total As, Fe, Mg, V)
Lab quote number: NRG recent pricing
QA/QC Reporting Level: CTDEP RCP and SSQAPP
Standard TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	12-02 1100	1 [signature]	2 [signature]	12/2/16 1254	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	Intact / Not intact; Preserved where applicable; On Ice ☑	Cooler Temp. 1.8°C

MC48956: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: MC48956 **Client:** CB&I **Project:** NRG MONTVILLE

Date / Time Received: 12/2/2016 12:54:00 PM **Delivery Method:** SGS Courier **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #1: (1.8/1.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	IRGUN1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Comments

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

MC48956: Chain of Custody
Page 2 of 2

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **CB&I**

Project Location: **NRG Montville Lathrop Road, Montville, CT** **Project Number:** **1009644010 PO#**

Sampling Date(s): **12/2/2016**

Laboratory Sample ID(s): MC48956-1, MC48956-2, MC48956-3, MC48956-4, MC48956-1F, MC48956-2F, MC48956-4F

Methods: Refer to case narrative.

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☐ No ☑
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☑ No ☐
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☑ No ☐
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☑ No ☐

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:  Position: Lab Director

Printed Name: H. (Brad) Madadian Accutest New England Date: 12/16/2016

Reasonable Confidence Protocol
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: **Accutest New England** **Client:** **SGS Accutest New England**

Project Location: **FDG: NRG Montville Lathrop Road, Montville, CT** **Project Number:** **FDG18607**

Sampling Date(s): **12/2/2016**

Laboratory Sample ID(s): MC48956-1, MC48956-2, MC48956-3, MC48956-4, MC48956-1F, MC48956-2F, MC48956-3F, MC48956-4F

Methods: EPA 200.7, SM4500S2- F-11

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents)?	Yes ☑ No ☐
1A	Where all the method specified preservation and holding time requirements met?	Yes ☑ No ☐
1B	VPH and EPH mehods only: Was the VPH or EPH method conducted without significant modifications (See section 11.3 of respective methods)	Yes ☐ No ☐ NA ☑
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes ☑ No ☐
3	Were samples received at an appropriate temperature (<6° C)?	Yes ☑ No ☐
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	Yes ☑ No ☐
5	a) Were reporting limits specified or referenced on the chain-of-custody?	Yes ☑ No ☐
	b) Were these reporting limits met?	Yes ☑ No ☐
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes ☑ No ☐
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	Yes ☐ No ☑

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence".

I, the undersigned, attest under pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature: Nancy F. Cole Position: Lab Director

Printed Name: Nancy Cole Mid-Atlantic Laboratory Date: 12/15/2016

Internal Sample Tracking Chronicle

CB&I

Job No: MC48956

NRG Montville Lathrop Road, Montville, CT
Project No: 631207126

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48956-1	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402		Received: 02-DEC-16 By: TF			
MC48956-1	ASTM516-90,02	02-DEC-16	EAL			SO4
MC48956-1	SM 21 4500 NO2 B	02-DEC-16 14:10	MC	02-DEC-16	MC	NO2
MC48956-1	EPA 365.3	02-DEC-16 15:44	VY			OPO4
MC48956-1	SM4500S2- F-11	05-DEC-16 16:25	ANJ			S
MC48956-1	SM21 5310 B	05-DEC-16 16:40	VY	05-DEC-16	VY	TOC
MC48956-1	EPA 353.2	08-DEC-16 16:46	VY			NO3O
MC48956-1	EPA 353.2	08-DEC-16 16:46	VY	08-DEC-16	VY	NO32
MC48956-1	EPA 200.7	14-DEC-16 21:39	ANJ	14-DEC-16	ANJ	AS,FE,MG,V
MC48956-2	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402-DUP		Received: 02-DEC-16 By: TF			
MC48956-2	EPA 200.7	14-DEC-16 21:42	ANJ	14-DEC-16	ANJ	AS,FE,MG,V
MC48956-3	Collected: 02-DEC-16 09:00 By: AM EQUIPMENT BLANK		Received: 02-DEC-16 By: TF			
MC48956-3	EPA 200.7	14-DEC-16 21:45	ANJ	14-DEC-16	ANJ	AS,FE,MG,V
MC48956-4	Collected: 02-DEC-16 10:10 By: AM AOC12-MW-401		Received: 02-DEC-16 By: TF			
MC48956-4	ASTM516-90,02	02-DEC-16	EAL			SO4
MC48956-4	SM 21 4500 NO2 B	02-DEC-16 14:10	MC	02-DEC-16	MC	NO2
MC48956-4	EPA 365.3	02-DEC-16 15:44	VY			OPO4
MC48956-4	SM4500S2- F-11	05-DEC-16 16:25	ANJ			S
MC48956-4	SM21 5310 B	05-DEC-16 16:53	VY	05-DEC-16	VY	TOC
MC48956-4	EPA 353.2	08-DEC-16 16:47	VY			NO3O
MC48956-4	EPA 353.2	08-DEC-16 16:47	VY	08-DEC-16	VY	NO32
MC48956-4	EPA 200.7	14-DEC-16 21:48	ANJ	14-DEC-16	ANJ	AS,FE,MG,V
MC48956-1E	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402		Received: 02-DEC-16 By: TF			
MC48956-1E	EPA 200.7	14-DEC-16 21:51	ANJ	14-DEC-16	ANJ	AS,FE,MG,V

Internal Sample Tracking Chronicle

CB&I

Job No: MC48956

NRG Montville Lathrop Road, Montville, CT
Project No: 631207126

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48956-2F	Collected: 02-DEC-16 08:20 By: AM			Received: 02-DEC-16	By: TF	
AOC12-MW-402-DUP						
MC48956-2E	EPA 200.7	14-DEC-16 21:54	ANJ	14-DEC-16	ANJ	AS,FE,MG,V
MC48956-4F	Collected: 02-DEC-16 10:10 By: AM			Received: 02-DEC-16	By: TF	
AOC12-MW-401						
MC48956-4E	EPA 200.7	14-DEC-16 21:58	ANJ	14-DEC-16	ANJ	AS,FE,MG,V

QC Evaluation: CT RCP Limits

Job Number: MC48956
Account: CB&I
Project: NRG Montville Lathrop Road, Montville, CT
Collected: 12/02/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC48956

General Chemistry

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QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48956
Account: FDG - CB&I
Project: NRG Montville Lathrop Road, Montville, CT

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Nitrogen, Nitrate + Nitrite	GP21174/GN55484	0.10	0.036	mg/l	2	2.17	108.5	90-110%
Nitrogen, Nitrite	GP21167/GN55466	0.010	0.0	mg/l	.02	0.020	100.0	80-120%
Phosphate, Ortho	GN55475	0.10	0.0	mg/l	.2	0.20	100.0	80-120%
Sulfate	GN55468	5.0	0.0	mg/l	20	19.9	99.5	80-120%
Total Organic Carbon	GP21171/GN55481	1.0	0.0	mg/l	10	9.70	97.0	80-120%

Associated Samples:
Batch GN55468: MC48956-1, MC48956-4
Batch GN55475: MC48956-1, MC48956-4
Batch GP21167: MC48956-1, MC48956-4
Batch GP21171: MC48956-1, MC48956-4
Batch GP21174: MC48956-1, MC48956-4
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48956
Account: FDG - CB&I
Project: NRG Montville Lathrop Road, Montville, CT

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Phosphate, Ortho	GN55475	MC48956-1	mg/l	0.079	0.048	48.8(a)	0-20%
Total Organic Carbon	GP21171/GN55481	MC48956-1	mg/l	0.0	0.0	0.0	0-20%

Associated Samples:
Batch GN55475: MC48956-1, MC48956-4
Batch GP21171: MC48956-1, MC48956-4
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48956
Account: FDG - CB&I
Project: NRG Montville Lathrop Road, Montville, CT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Phosphate, Ortho	GN55475	MC48956-1	mg/l	0.079	.2	0.29	105.5	75-125%
Total Organic Carbon	GP21171/GN55481	MC48956-1	mg/l	0.0	10	9.2	92.0	75-125%

Associated Samples:
Batch GN55475: MC48956-1, MC48956-4
Batch GP21171: MC48956-1, MC48956-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest New Jersey)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- QC Evaluation: CT RCP Limits

Job Change Order: MC48956

Requested Date:	12/5/2016	**Received Date:**	12/2/2016
Account Name:	CB&I	**Due Date:**	12/16/2016
Project Description:	NRG Montville Lathrop Road, Montville, CT	**Deliverable:**	CTRCP
CSR:	jeremyv	**TAT (Days):**	10

==========

Sample #: MC48956-1 through 4

Dept:

TAT: 10

Change:
Client would like to report MDL / J Values; Currently logged in at ALNJ to omit J Values.

==========

Above Changes Per:

Date/Time: 12/5/2016 11:38:20 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

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MC48956: Chain of Custody
Page 1 of 4
SGS Accutest New Jersey

SGS Accutest Sample Receipt Summary

Job Number: MC48956 **Client:** SGS Accutest **Project:** NRG

Date / Time Received: 12/3/2016 10:00:00 AM **Delivery Method:** Other Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments Did not receive -3F (filtered volume)

SM089-02
Rev. Date 12/1/16

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MC48956: Chain of Custody
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SGS Accutest Sample - Problem Resolution

Accutest Job Number: MC48956

CSR: Michelle **Response Date:** 12/5/2016

Response: -3F is not needed per Thelma Flaherty

SM089-02
Rev. Date 12/1/16

MC48956: Chain of Custody
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SGS ACCUTEST

CHAIN OF CUSTODY

WW WRB DUP

Page 1 of 1

50 D'Angelo Drive, 495 Technology Center West, Bldg One, Marlborough, MA 01752
TEL. 508-481-6200 FAX: 508-481-7753
www.sgs.com

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job: MC48956

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 50 D'Angelo Drive, 495 Technolgy Center West, BLDG One
City: Marlbourough, State: MA, Zip: 0175?
Project Contact: jeremyv, E-mail: jeremyv@accutest.com
Phone #: 508-481-6200, Fax #
Sampler(s) Name(s): AM, Phone

Project Information

Project Name: NRG Montville Lathrop Road, Montville, CT
Street
City, State
Project #
Client Purchase Order #
Project Manager

Billing Information (if different from Report to)
Company Name
Street Address
City, State, Zip
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH+ZN	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	S	AS ,FE ,MG ,V (200.7)	LAB USE ONLY
1F	AOC12-MW-402		12/2/16	8:20:00 AM	AM	AQ	1			x							X	
1	AOC12-MW-402		12/2/16	8:20:00 AM	AM	AQ	2		x	x						X	X	
2F	AOC12-MW-402-DUP		12/2/16	8:20:00 AM	AM	AQ	1			x							X	MA
2	AOC12-MW-402-DUP		12/2/16	8:20:00 AM	AM	AQ	1			x							X	
3F	EQUIPMENT BLANK		12/2/16	9:00:00 AM	AM	AQ	1			x							X	
3	EQUIPMENT BLANK		12/2/16	9:00:00 AM	AM	AQ	1			x							X	
4F	AOC12-MW-401		12/2/16	10:10:00 AM	AM	AQ	1			x							X	
4	AOC12-MW-401		12/2/16	10:10:00 AM	AM	AQ	2		x	x						X	X	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

- ☐ Std. 10 Business Days
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☒ other Due 12/16/2016

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☒ Other CTRCP

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Ship to ALNJ **10 Day TAT

INITIAL ASESSMENT 2ADV

LABEL VERIFICATION [signature]

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	12/2/16 2020	1 [signature]	2 [signature]	12/3/16 10:0?	2 [signature]
3		3	4		4
5		5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☐ Cooler Temp. 2.1°C

MC48956: Chain of Custody
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Internal Sample Tracking Chronicle

SGS Accutest New England

Job No: MC48956

FDG: NRG Montville Lathrop Road, Montville, CT
Project No: 631207126

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC48956-1	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402		Received: 02-DEC-16		By: DG	
MC48956-1	SM4500S2- F-11	05-DEC-16 16:25	ST			S
MC48956-1	EPA 200.7	14-DEC-16 21:39	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-2	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402-DUP		Received: 02-DEC-16		By: DG	
MC48956-2	EPA 200.7	14-DEC-16 21:42	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-3	Collected: 02-DEC-16 09:00 By: AM EQUIPMENT BLANK		Received: 02-DEC-16		By: DG	
MC48956-3	EPA 200.7	14-DEC-16 21:45	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-4	Collected: 02-DEC-16 10:10 By: AM AOC12-MW-401		Received: 02-DEC-16		By: DG	
MC48956-4	SM4500S2- F-11	05-DEC-16 16:25	ST			S
MC48956-4	EPA 200.7	14-DEC-16 21:48	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-1F	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402		Received: 02-DEC-16		By: DG	
MC48956-1F	EPA 200.7	14-DEC-16 21:51	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-2F	Collected: 02-DEC-16 08:20 By: AM AOC12-MW-402-DUP		Received: 02-DEC-16		By: DG	
MC48956-2F	EPA 200.7	14-DEC-16 21:54	ND	14-DEC-16	DP	AS,FE,MG,V
MC48956-4F	Collected: 02-DEC-16 10:10 By: AM AOC12-MW-401		Received: 02-DEC-16		By: DG	
MC48956-4F	EPA 200.7	14-DEC-16 21:58	ND	14-DEC-16	DP	AS,FE,MG,V

QC Evaluation: CT RCP Limits

Job Number: MC48956
Account: SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT
Collected: 12/02/16

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job MC48956

Metals Analysis

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/14/16

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	20	22		
Antimony	6.0	1.2	3.1		
Arsenic	3.0	1.5	2.8	0.20	<3.0
Barium	200	.5	.54		
Beryllium	1.0	.3	.31		
Bismuth	20	2.3	2.8		
Boron	100	1.9	2.4		
Cadmium	3.0	.2	.43		
Calcium	5000	8.2	14		
Chromium	10	.6	1.1		
Cobalt	50	.2	.41		
Copper	10	.8	2.6		
Iron	100	8.9	18	-1.9	<100
Lead	3.0	1	2.5		
Lithium	20	2.9	3.5		
Magnesium	5000	88	90	-9.2	<5000
Manganese	15	.1	.48		
Molybdenum	20	.3	1.4		
Nickel	10	.4	.64		
Palladium	50	2.1	2.8		
Potassium	10000	78	99		
Selenium	10	2.6	3.6		
Silicon	200	2.6	15		
Silver	10	.7	.97		
Sodium	10000	20	25		
Sulfur	50	4.8	6.9		
Strontium	10	.2	.22		
Thallium	2.0	1.2	1.8		
Tin	10	.5	1.6		
Titanium	10	.7	1.4		
Tungsten	50	1.1	2.1		
Vanadium	50	.5	.72	-0.10	<50
Zinc	20	.1	1.2		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542 Methods: EPA 200.7
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/14/16

Metal	RL	IDL	MDL	MB raw	final
Zirconium	10	.3	1		

Associated samples MP97542: MC48956-1, MC48956-2, MC48956-3, MC48956-4, MC48956-1F, MC48956-2F, MC48956-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/14/16

Metal	BSP Result	Spikelot MPSPK1	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	1920	2000	96.0	85-115
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	23700	25000	94.8	85-115
Lead	anr			
Lithium				
Magnesium	23500	25000	94.0	85-115
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Sulfur				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	1880	2000	94.0	85-115
Zinc	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542
Matrix Type: AQUEOUS

Methods: EPA 200.7
Units: ug/l

Prep Date: 12/14/16

Metal	BSP Result	Spikelot MPSPK1	% Rec	QC Limits
Zirconium				

Associated samples MP97542: MC48956-1, MC48956-2, MC48956-3, MC48956-4, MC48956-1F, MC48956-2F, MC48956-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542 Methods: EPA 200.7
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/14/16

Metal	JC33051-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	2.70	0.00	100.0(a)	0-10
Barium				
Beryllium				
Bismuth				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper	anr			
Iron	0.00	0.00	NC	0-10
Lead	anr			
Lithium				
Magnesium	24300	25600	5.6	0-10
Manganese				
Molybdenum				
Nickel				
Palladium				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Sulfur				
Strontium				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium	0.00	0.00	NC	0-10
Zinc	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

QC Batch ID: MP97542 Methods: EPA 200.7
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/14/16

	JC33051-1F		QC
Metal	Original SDL 1:5	%DIF	Limits
Zirconium			

Associated samples MP97542: MC48956-1, MC48956-2, MC48956-3, MC48956-4, MC48956-1F, MC48956-2F, MC48956-4F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry

QC Data Summaries

(SGS Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: MC48956
Account: ALNE - SGS Accutest New England
Project: FDG: NRG Montville Lathrop Road, Montville, CT

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Sulfide	GN56002	2.0	0.0	mg/l	9.8	9.6	98.0	80-120%
Sulfide	GN56002			mg/l	4.9	5.0	102.0	80-120%

Associated Samples:
Batch GN56002: MC48956-1, MC48956-4
(*) Outside of QC limits